

AMENDMENTS TO THE CLAIMS

In the claims, please amend claims 1, 7, 12, and 16 as follows:

1-4. (canceled)

5. (currently amended) A process for delivering a polynucleotide to the cytoplasm of a cell in vitro consisting of:

- forming a styrene-maleic anhydride random copolymer having 50% styrene and 50% maleic anhydride;
- increasing hydrophobicity of the copolymer by randomly attaching hydrophobic groups along the copolymer backbone in a sufficient amount to form a membrane active polyanion capable of lysing mammalian cell membranes at pH 6.5 wherein randomly attaching hydrophobic groups along the copolymer backbone consists of reacting hydrophobic amines or hydrophobic alcohols with reacting the anhydride monomers in the copolymer with hydrophobic amines or hydrophobic alcohols thereby forming a membrane active polyanion capable of lysing mammalian cell membranes at pH 6.5; and
- contacting said cell with said polynucleotide and said membrane active polyanion such that the polynucleotide and the membrane active polyanion are endocytosed by the cell.

6. (canceled)

7. (currently amended) The process of claim 5 wherein the hydrophobic amines consist of alkyl amines increasing hydrophobicity of the copolymer consists of reacting the anhydride monomers in the copolymer with hydrophobic amines.

8-11. (canceled)

12. (currently amended) A process for delivering a polynucleotide to the cytoplasm of a cell in vitro consisting of:

- forming a butyl vinyl ether-maleic anhydride alternating copolymer;
- increasing hydrophobicity of the copolymer by ~~randomly attaching hydrophobic groups along the copolymer backbone in a sufficient amount to form a membrane active polyanion capable of lysing mammalian cell membranes at pH 6.5 wherein randomly attaching hydrophobic groups along the copolymer backbone consists of reacting hydrophobic amines or hydrophobic alcohols with reacting the anhydride monomers in the copolymer with hydrophobic amines or hydrophobic alcohols thereby forming a membrane active polyanion capable of lysing mammalian cell membranes at pH 6.5;~~ and
- contacting said cell with said polynucleotide and said membrane active polyanion such that the polynucleotide and the membrane active polyanion are endocytosed by the cell.

13.-15. (canceled)

16. (currently amended) The process of claim 12 wherein ~~the hydrophobic amines consist of alkyl amines increasing hydrophobicity of the copolymer consists of reacting the anhydride monomers in the copolymer with hydrophobic amines.~~

17-22. (canceled)